

WHAT IS CLAIMED IS:

1. An engine of a compression-ratio variable type, comprising a connecting rod connected at one end to a piston through a piston pin, a subsidiary rod connected to a crankshaft through a crankpin and to the other end of said connecting rod, a control rod connected at one end to said subsidiary rod at a location displaced from a connected position of said connecting rod, a support shaft turnably carried in an engine body, and an eccentric shaft mounted at an eccentric location on said support shaft and connected to the other end of said control rod, the turned position of the support shaft being changed to change the compression ratio,

wherein the engine further includes a one-way clutch mounted between said support shaft and said engine body in such a manner that the direction of turning of said support shaft is limited, a turned-position limiting means for limiting the turned position of said support shaft selectively at a plurality of points, and buffering means for moderating a load applied to at least one of said support shaft and said turned-position limiting means upon changing-over of said compression ratio.

2. An engine of a compression-ratio variable type according to claim 1, wherein a flywheel is secured to said crankshaft so that a rotational force is transmitted from a recoil starter to said flywheel in response to the starting operation of the engine; said buffering means comprises an output member disposed coaxially with said crankshaft in such a manner that the rotational force in the same direction as that of said recoil starter can be

transmitted to said flywheel, and the rotation thereof is limited when said recoil starter is not operated, an input member coaxial with said output member, and a spiral spring mounted between said output member and said input member; and a torque transmitting means is mounted between said support shaft and said input member so that it transmits the rotational force in a direction to wind up the spiral spring from said support shaft to said input member until the completion of the winding-up of said spiral spring, but it permits said support shaft to be raced after the completion of the winding-up of said spiral spring.

3. An engine of a compression-ratio variable type according to claim 1, wherein limiting abutments are provided on said support shaft at a plurality of points axially spaced apart from each other with their positions displaced in a circumferential direction of said support shaft; an actuator is connected to a limiting member for driving said limiting member in turning, said limiting member being carried in the engine body to constitute a portion of said turned-position limiting means so that it can be turned about an axis perpendicular to said support shaft to come into abutment alternatively against one of said limiting abutments to limit the turned position of said support shaft; and said buffering means is interposed between said limiting member and the engine body in order to moderate an axial shock upon the abutment of the alternatively selected limiting abutment against said limiting member.

4. An engine of a compression-ratio variable type according to claim 1, wherein said buffering means is mounted between said support shaft and the engine body to moderate the radial load applied from said control rod to said support shaft.